WHAT IS CLAIMED IS:

1. An SLM (spatial light modulator) -based projection display system, comprising:

an articulating unit having at least the optical path components of the display system and the SLM, the optical components comprising at least an illumination system and a projection lens, the rotating unit moveable from a stow position to an operating position, such when the rotating unit is moved to the operating position, the image formed by the SLM is re-oriented to a position suitable for viewing;

a platform unit operable to rest on a flat surface when the projection display system is in use,

at least one mechanism for attaching the rotating unit to the platform unit, such that the rotating unit and the platform unit may form an angle relative to each other when the rotating unit is deployed and may lie in parallel planes in the stow position; and

a locking mechanism for holding the rotating unit in place when the rotating unit is in the operating position.

2. The system of Claim 1, wherein the articulating unit contains all operating components of the display system.

3. The system of Claim 1, wherein the platform unit contains at least a power supply.

4. The system of Claim 1, wherein the locking mechanism is a self locking mechanism associated with the mechanism.

5. The system of Claim 1, wherein the optical path components further comprise telecentric prism optics.

6. The system of Claim 1, wherein the articulating unit further contains a power supply.

7. The system of Claim 1, wherein the system is housed in a housing no more than two inches in height.

8. The system of Claim 1, wherein the system is housed in a housing less than ten inches on each side.

9. The system of Claim 1, wherein the SLM is a digital micro mirror device (DMD).

10. The system of Claim 1, wherein the SLM is a reflective liquid crystal display (LCD) array.

11. The system of Claim 1, wherein the angle of the rotating unit is determined at least in part by the illumination requirements of the SLM.

12. The system of Claim 1, wherein the angle of the rotating unit is determined at least in part by a tilt position of the SLM.

13. An SLM (spatial light modulator) -based projection display system, comprising:

a repositionable optical unit containing at least the SLM, projection optics, and a projection lens, the optical unit moveable from a stow position to an operating position at an angle relative to the stow position, the operating position being such that the image formed by the SLM is re-oriented to a position suitable for viewing; and

a platform unit operable to rest on a flat surface when the projection display system is in use, the platform unit containing all other operating components of the display system, comprising at least an illumination source, a power supply, and a color wheel.

14. The system of Claim 13, wherein the optical unit is both translated and rotated from the stow position to the operating position.

15. The system of Claim 13, wherein the optical unit is translated at an angle from the stow position to the operating position.

16. The system of Claim 13, wherein the optical path components further comprise telecentric prism optics.

17. The system of Claim 13, wherein the system is housed in a housing no more than two inches in height.

18. The system of Claim 13, wherein the system is housed in a housing no more than ten inches on each side.

19. An SLM (spatial light modulator) -based projection display system, comprising:

a platform unit operable to rest on a flat surface when the projection display system is in use, the platform unit containing all operating components of the display system, namely, at least the SLM, a power supply, an illumination source, and electronics associated with the SLM; and

a fold mirror in the optical path between the illumination source and the SLM, the fold mirror operable to pop out from the platform unit when the display system is in use, such that the fold mirror redirects light from the illumination source to an optical path leading to the SLM.

20. The system of Claim 19, wherein the system is housed in a housing no more than two inches in height.